examine both groups of claims is less than the burden on Applicants/the public to prosecute/search two separate applications/patents.

Applicants submit that cancellation of the non-elected claims does not change the inventorship in the present application.

Claims 1-12 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Applicants submit that the rejection is moot, as Claims 1-12 have been replaced by newly added Claims 22-28, in which Applicants bore the Examiner's comments in mind. Applicants submit that the mold ejection mechanism of Claim 24 is discussed in the specification at page 7, lines 6-10, and is shown in Figure 1 as reference number 5.

Claims 1-5, 7-9, and 11-12 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Trampusch in view of Settles, further in view of Opel et al. Claims 6 and 10 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Trampusch in view of Settles, in view of Opel et al., and further in view of Swain et al. Applicants respectfully traverse these rejections.

Trampusch teaches cleaning a mold *in situ* with a conventional dry ice blasting system by the providing a chamber to reduce the sound emission to such an extent that cleaning of the mold can take place directly at the machine without any adjacent processes being disrupted. Trampusch uses pelletized dry ice in the system, and the size of the individual pellets is not suggested. Trampusch is also silent as to the mass ratio of gas to dry ice, and the gas flow rate.

Settles teaches an abrasive ice-blasting apparatus, and process for manufacturing ice particles near the point of use just before the blast nozzle. The

particles are then immediately accelerated through the blast nozzle. Experimental observations included in the description note that the particle sizes varied between 45 and 100 micrometers, or 0.0018 to 0.004 inches. Settles suggests that it is desirable to maximize the ice to gas mass flow rate ratio, with the limitation that the ratio should not be so high as to render the device ineffective. This imprecise statement does not suggest a practical range for effective cleaning to one skilled in the art. In addition, Settles uses frozen water granules as opposed to dry ice particles, and the granule sizes suggested by Settles are on the order of ten times smaller than the granule sizes of the claimed invention. Although Settles recognizes the role of the mass flow ratio in effective cleaning, it teaches away from the claimed range by indicating that it is desirable to maximize the ratio.

Opel et al. provides a granulator blasting apparatus for high speed delivery of dry ice granules, the granules being conveyed and accelerated directly upon production thereof. Opel et al. incorporates by reference U.S. Patent No. 5,203,794 to Stratford et al., in which a system for accelerating and comminuting dry ice particles is taught.

Stratford et al. teaches predicted particle velocities for the claimed particle size range, the predicted values being within the expected range for the presently claimed method. However, both Opel et al. and Stratford et al. are silent with respect to a suggested gas-to-dry ice mass ratio, the ratio being an important operating criteria for the claimed method of cleaning an injection mold.

Swain et al. is cited for teaching a flow rate of 14 SCFM in a system for cleaning with carbon dioxide snow. However, Swain et al. does not remedy the

deficiencies of the combination of Trampusch, Settles, and Opel at al., as discussed above.

In addition, Applicants submit that there does not seem to be any motivation to combine the teachings of Trampusch and Settles. There is no teaching or suggestion in either reference to combine them, as one is directed to the production of a blast stream of water ice particles, and the other is directed to cleaning of rubber tire molds using dry ice pellets.

Applicants submit that the cited references, taken individually or combined, do not teach or suggest the presently claimed invention. Specifically, they do not teach a method of cleaning an injection mold including the steps of configuring the operating controls of a dry ice blasting system to produce a cleaner flow comprising dry ice granules entrained in a gas with the dry ice granules ranging in size from approximately 0.005 to 0.040 inches in diameter, at a gas-to-dry ice mass ratio ranging from approximately 2.0 to 3.5, and at a gas flow rate ranging from approximately 3 to 50 SCFM; and positioning a nozzle tip of a hand tool from a preform surface to be cleaned; and triggering the operation of the blasting system to initiate the cleaner flow. Accordingly, Applicants submit that Claims 22-28 are patentable over the cited references.

Applicants submit that this application is in condition for allowance in view of the amendments and remarks set forth above. Prompt issuance of a notice thereof is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3500. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

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